

Wes

university note book

Brazil 1979

NAME

Amazonia #3

SUBJECT



No. 45-4852 (S-1812-N) END OPEN • 7 $\frac{3}{4}$ IN. x 5 IN. (19.7 cm x 12.7 cm) • 80 SHEETS • NARROW RULED
No. 45-4872 (S-1810-N) SIDE OPEN

VERNON McMILLAN, Inc., ELIZABETH N.J. 07208

AMAZONAS, BRAZIL

6892

les

AMAZONAS, BRAZIL

Cleofe E. Calderon, O. P. Monteiro
& J. Guedes

*Collected under the auspices of Instituto Nacional de Pesquisas
Amazonicas (INPA) and the Smithsonian Institution*

Laque br. comp.

2867

Arthrostylidium

2894 -

2910

(2970) flowers -

K-177 (B or A.?)

K. 190 +

K. 209 +

K-210 +

K. 222 (i a 190) flowers -

K 236

2867 — c23/4 - culms & rhizomes —

2894 — c23/3 c, branch - rh -

2910 — 23/6 c; br, rh -

(2970)
flowers

K-177 (B or A?) — 23/1 c, br, ~~rh~~ -

K-190

K-209 — 23/1 c, br -

K-210 — 23/6 c, br, rh -

K-222 (fl. #190) — 23/1 c, br -

K-236 23/1 c. / br -

BOTÂNICA

Nº do coletor: 893

INPA MANAUS-AM

Sigla e endereço do Herbário

Nome

Endereço

Pare mais informacoes sobre estudos de
propriedades fisicas

Porto Velho

Secretaria de Planejamento do Governo
Secretaria de Obras - Eng.º Aldemir
Guerreiro Vilar.

Encontro do DNER em P. Velho a Sampaio
tel. 3815-
este endereço do
engenheiro

Brazil 1979

Amazonia # 3

les

(near shore - today as before 2841)
~~Blackish (faded)~~ ^{rock #2}

could be the same
Pteridophyte

Very delicate fern growing
on rock of a creek

Pteridophyte 2842

growing on rocks of creek

Pteridophyte 2843

growing on rock

Pteridophyte 2844

Large fern on rocks of
creek (at present almost
dry -)

Oreganid 2845

Territorial, near creek -
unian

Bamboo 2846
Gnedeue -

Great ~~clumps~~ ^{clumps} with incan-
gly thicker shoot as they
come up from rhizome
(not true is the same as
climbing one collected yester-
day (2828). Thicker, shoots
up to 3 cm, starting as
rubs of less than 1 cm.
Great and then putting
over repeat, about 8 cm tall
Beautiful rhizome (collected)
showing the increase of big
smooth culms, with
some white wax when
young - look like A
- both almost? a pleasure
when they spring - no

flower. Leaves very large
braided like, ~~which~~ thick
Also in upper or lower
branches, the leaves are
narrower.
(It seems it is the same
collected early as 2828
but then with a very
young, the beginning of a
new clump.)

FAA: Bud & leaves (2 v.)
rhizome & falling material
Photos: few in color (but
poor light)

x check the B & W photo: Roll #16. looks like
is a mixture of this Gnedeue and the
thin one collected early -

July 15 2847
Polk Co. 3-km S of Van Wert, Mo.

~~Thus~~
~~Mucosae~~

Dro. red, fruit green
(unicum)

~~Bythneria?~~ ~~Stachyaceae~~ 2848
Bythneria?

Shrub (theophrastaceae) at edge
of forest. Flowers yellow green.

~~Malvaceae~~ Solanaceae 2849

Small tree ca 5 m, with top
fruit & flower. bark like

Lepurum. landpin.
Larva ?

2850

Small tree, ca 4 m, with
fruit only, at edge of
humid forest.

at edge of top. ^{road from S. L. to A. Mexico} 50'
ca 1/2 km N of Van Wert, Mo.
Lepurum? Then above (N. of Van Wert, Mo.)
Palmer 2851

Small, ca 1.5 m, with red
orange fruit.

Theophrastaceae

2852

Merje

Plant ca. 80 cm. near
ipomoea, like a wattle plant -
with short, thick trunk-like
flower small, in a raceme

Conchocarpus?

2853

Small plant with white flowers
at edge of grass

Rubiaceae

2854

Prunella cf. Prunella
Tree, ca. 5m, with fruit
only.

~~Rubiaceae~~ Boraginaceae 2855

Shrub, ca. 1.50 with many
flowers (big ones, (see photo))

Rubiaceae

2856

Beautiful inflorescence of large
white flowers on top of stem
near grass.

Rubiaceae

2857

Shrub, ca. 1.50 with fruit,
growing near edge of grass

Ranunculaceae

2858

Shrub ca. 1.20 - 1.50 with
large flowers, white with faint
hint of violet inside and one
violet line on each petal. Yellow
hairs on the inflorescence.
PAN, photo

Ranunculaceae

2859

Robust plant, up to 1.60+?
habit of inflorescence. Herbaceous
red, flowers yellow ± when
as an opened, then pale ivory
pink.
no PAN, photo was

Stecchericaceae 2860

Shrub, ca 1.50 m with
fruit only.

2861

Rutaceae

Metrodorea flanda Krause ^{det B. G.}
Tree, ca: 10 m, near iporã

?

2862

Shrub, ca. 1.50 m with large
^{yellow} orange (hole)

Meleostomataceae 2863

Miconia ericocalyx Bogn.

Shrub or small tree ca. 2-4 m
with young fruit.

July 16

2864

Roraima, ~~near~~ Minicupã
São Lourenço, 20 km NW of
Maturuparana; ^{sampled} near town
to ^{near} Lourenço villa.

Rutaceae

Herb, near iporã. Bract
red, flowers yellow.

Lupinus Papilion.

2865

Woody plant, common, ~~near~~
at edge of forest. Flowers violet
blue.

Cruciferae

2866

Young at edge of forest
at heart.

Arthrostylidium
~~Arthrostylidium~~

2867

Very young population, main
plant I seed probably 1 or 2
years ago, but one is 2
meters high with leaf &
few inflorescences. Lots of
new plants in 7 stages
were already climbing and
about 3 m high.
Culm leaf with great
glauk, at least when
young and in new shoots
like bamboo type.

We found a very old stem
with culm about 1 cm or
so, hollow with small
hole in center. We saw
old nodes with leaf
no of bracts in a row
and plant with dry thick
central one
spike with many
nodes?

~~Potamogeton~~ leaves very delicate
small

Photo: 2019 x

5. wh-
leaves: FAA

bulky rhizomes 2
in the middle

Piperaceae

2868

Shrub, ca 1.70 m in front
mixed with bamboo

Marantaceae

2869

Flower yellow, unicum

July 17

2870

Pondok, the road NW of
Mutanpandan, across N bank
of Rio Madeline. Mined
the Maricao - ca. (17 + 27? km
NW of P. Luncu)

Marantaceae

Very abundant, robust Maranta
chrys in beautiful, tall,
fences in front.

It looks like some N. J.
collected in Bolivia, in 72
near Gaudin, (the garden
to ? going the right to the

west or also like some
collected in 76 probably
in the same, in Maricao
strong, but thin and
with long internodes. One
was 1.20 m short (118)
with thick wall.

Thick branches, starting from
few and after + 50 ft.
they are more they in itself
branches they do not
form a very clear, clear
"shield"

Stems of which with
band of hairs, reticulate
white, silky & woolly -
leaf sheath velvety white
pubescent with reticulate
shade very distinctive.

Plants not very tall
up to 8 m? + Maricao
herb.

But the plant very
interesting, stating that
and at once. Since they
very abundant for the

big, large leaf couple.
Leaves with large, short
toasted leaf stalks -

Flora: S.W. - 20-25

Flora (2) - Subj. large
Bulky: 2 Shiguns, 3 cal
formations.

(Note: near 'iporosi', on road
back to São Lourenço)

Pteridophyte 2871

Small, delicate fern
near 'iporosi'

Pteridophyte 2872

Strong, large plants, up to
1.66 m. or more

July 18

2873

Proclamation, Road Matupá to
Mineração São Lourenço, Km E of Santa
of Rio Madureira (at edge of new igarapé)
Bambusa (Guadua) cobria!

Bamboo very long! monopodial?
with some roots separate
by pieces of rhizome ~~from~~ up
to 1.38, 1.74, 1.83 m!
very little thickened at
nodes. very superficial
just with a layer of
soil & dry leaves -

Very unusual structure, giving
very repetitive from each
other, not forming clumps
some culms + close and
30 cm but mostly by
far apart, on April 1.74 m

to 1.83 m.
culms very strong and I could
all the way from base to
tip and without any branching
Internodes smooth nodes
with sharp to the ridge
and 3 sharp but short
hook-like spines.
The upper above same (+
1 m) start receding
main branch which
has short internodes, se-
shorter than culm with
3 leafy complement on
each or some spines (small)
leaf complement of + small
isolate rather narrow
blade. Leaves from main
culm on 1 or 2 small branches
lateral to the main. These

leaf complement large and
black also large, with the
inflection on the stem-like
but leaf deciduous can
remain culm, and no
new growth seen.
The developing main branch
we found culm base
still attached. Very pretty
glabrous or so with short
erect blade ending (or forming
only by) a thin awn.

Blots B x W x color 400 Fht.
of rhizome and per
by plant (dark ending)
bulky material: 2 leaf
rhizome, pieces of culm
and broken complement.
FRA: leaves only -
growing on low tree form
but dense, like cernuus
type. In some are mixed
with a Menziesia sp. (2874)
or tall campine

Merostachys

2874

(same loc. as (Guzmania))

Beautiful Merostachys forming
very dense large clumps.
in low dense forest mixed
with bamboo, also mixed
with Mer. a very rare Guzmania
About 8 m tall & less than
1 cm in diam. - very
thin, fragile culms, very
smooth surface, with
small, simple nodal
region; no upper ridge but
two glands on thick ridge
or hairs.

Leaves bladeless
with short sheath & caducous
Very few new culms seen
Many branches per node
and very thin, delicate
branches, leaf co forest
medium - small, blades
narrow, glaucous & little
apexes -

Rhizome typical, ± dense
perennial -

PRA leaves & buds (2)
Bulky inigo o al
& branch in gl ment
Photo: B & W - & Ek. 400

Rodriguez of (H. de la Cruz)
 June 11. Negro, Rio Curicuriari, near
 from Aschapeló, Porto Campana St. 1876
 Lara from
 Phase - 1000

late Rodriguez of (H. de la Cruz)
 20. Sero 40 km, Rio Urubá,
 On between La Chorrera, Panama, and
 e Natal.
 Ege Phase, June 6, 1868
 for Panama

6. Rodriguez, Rio Maricao,
 vicinity of Maico, airstrip 1876
 Indian trail from
 A. Surucuri to Maico

7. Rodriguez, (H. de la Cruz)
 1. Rio Urubá, Mandara-Laraca
 A. Rio Km 115 - growing in
 mosses on rock face 1877
 2. Phase, 1000 Aug. 75

at edge of river, p.
 "igapo"
 in
 in the water

Rodriguez p. (Cachoeira)

R. Hayes, Rio Curicuriari, Rio
Cachoeira, Rio & Cachoeira, Rio
Paua - Rio

Rodriguez p. (Cachoeira)

Serra do Paua, Rio Cachoeira,
between Cachoeira Tracena
& Natal.

France & June 6, 1940
Paua

Rodriguez Rio Cachoeira,
vicinity of Cachoeira Tracena
Indian trail from
Saurucuri to Mato

Rodriguez, (Cachoeira)

Rio Cachoeira, Matoa - Cachoeira
Rio km 115 - Gorge in
mosses on rock face.
France, J. Paua. Rio - 75

2375

July 30

Rio Aracari, between Manaus-
Aracari and before bifurcation.

about 1/2 way from road, near river
to tree.

Orquideae

Epiphyte, on tree at edge of river
forest on low bank. Flowers
color like (purple)

Anonaceae

2876

Tree, ca 5 m with fruit in
fruit ~~at~~ ^{at} river, tree probably in
forest.

Lauraceae

2877

In flower, tree ca. 4 m high
at edge of river, periodically inundated
"igapo"

MM

Pteridophyte

2878

Epiphyte on trees at edge of river

Boraginaceae?

2879

Shrub, near edge of river, white
flowers

Vinca

2880

Shrub in al. tree ca. 3 m. - w/ the
flowers -

Heliconiaceae

2881

Tree Shrub ca. 2 m. - w/ large
flowers, with perfume.

Piperaceae

2882

Epiphyte, on forest at edge of
river

Bauhinaceae

2883

Small plant with pale lilac flowers,
growing in two fine forest
near river.

Leguminosae.

2884

Tree about 6 m., double-flowered
flowers bright red with some
petals like rose - turning
red as the rest of the flower?
some with fruit?

Myristicaceae 2885
Tournefortia viridis Dubne
Small tree
ca. 3 m. in flower

Myristicaceae & Flacourtiaceae 2886
Casuaria sp.
Shrub. ca. 1.5-2 m. with
very young. fls or buds

Myristicaceae Rejlander 2887
Tree ca. 5 m., flowers mag.
white

Legum. Mimosa 2888
Tree, ca. 6 m. flowers white
near river to river

Apocynaceae 2889
Tree ca. 6 m. flowers
white with perfume, at
edge of river

Legum. Mimosa 2890
Tree ca. 7 m. flowers cream
white

Cyperaceae 2891
Grass between rock at
edge of river, near to
river

Leguminosae. Androp. 2892

Tree ca. 6m with spine
like inflorescence

Sapindaceae 2893

Tree ca. 7m with white
flowers. (fruits 3 winged)

Rug. 1st. 2894

Am. Rio Urubá, between Manaus
- Caracaras road and ferry to
Tucua. ~~near~~ near Serra da Lua
Arthur L. L. L.

Beautiful, detached to the
horizon in the forest
from near road to Tucua
Down river is also under a large
seen the dominant plant under the
canopy on both sides of river and

on the gentle slopes up to the
top of plateau where it's scarce
or absent. Plants mostly small
looking like a young population,
from ca. 50cm to 2m + but
here & there some taller and
in some spots a smaller shrub
with vine like branch 3 to 6m high
and culms thicker ^{about 1/2 cm} ~~about 1/2 cm~~
or little more, but less than 1cm.
Otherwise stem thread like and
internodes, culm leaf & look like
the whole plant sharp & green like
Selenia. Culm leaf or leaf tip ^{skin}
a ~~stick~~ sticking to clothes or skin -
Culm leaf all appears ("stick" also)
sheath with a thick, cork like
collar - pubescence on the back
near the base lower edge of sheath with
a crown of stiff, curly hairs, white
and thick in groups looking like
a ring of triangle at a line
through all the overlapping edges of the
sheath with long, appressed hairs
Oval retic. leaf a copper color.
Culm leaf blade erect, long &
about 2/3 the length of sheath

sessile, smaller, narrower than
the top of shoot. Very common
marking a falling very narrow,
branch complement of several
snakes very thin, coming from
the sides of the center of the shoot.
The base of main branch thick but
then not very thick (like *Bobina*).
If leaf complement a shade in
itself small, shade never exceeds
sclerite, fern like *Polypodium*.
Branches (2nd) rebranch on the distal
part with 2 leaf complement out
on 60.

FRA: leaves (flowers late on - 7 Sept)
 Pts: cola + B & W -
 bulky material: rubies,
 black w. sh. & garnets -

Aug. 2nd.

2895

Then from Rio P. Maribá, between
Hanoa and ^{Maracari} ~~Maracari~~ road and
down to Lina.

Passer Guianensis - 7

going on rocky a sand edge
of river, on the dotted bank -
going on sand cover by water.

Parsons

2896

at edge of rocky cliff with -

Robert L. Case

2897

Small & delicate at edge of river,
high river bank, rocky cliff -
Flowers white with orange spots
very pale blue. FAA. 4-2 flowers
Photos: aptz, Robbins, color

Panicum

2898

Twelve panicum, with in Hirsuta
shrub. (common with flax) 12

Panicum

2899

Grasses 1. tall, as thin. (2nd)

Cyperaceae

2899
2900

On rocky bank, about 60cm
tall, wide leaves

Cyperaceae

2901

Thin leaves, in fl. raceme
like

Pteridophyte

2902

Common on rocky face of
cliff along river, leaves
almost transparent. 12

Heriophyte

2903

Small fern. on rocks and
road along river.

Rutaceae

2904

Small tree, about 6m,
flowers white. near edge
of river.

Poliginella

2905

Common on rocky ~~face~~ of
cliff along river - mixed
with *Ruellia*, ferns etc.

Orantheae

2906

Epiphyllum on ^{rock} cliff. along
river, flower dark pink

Acanthaceae

2907

Small, short caudex
Flower pink-lilac

Gynandropsis

2908

Small plants growing on rock
at edge of river -
taken from the others by
collected some by this one
no more than 70 cm ~~apex~~
lvs. not

Ruellia nana

2909

DEB, DASH, LE, P, etc

Abundant, growing on rocky
face of cliff at edge of
river, between muds, ferns
Poliginella. Abundantly flowering
Plant very small, some
just 3 cm or less, some
trailing - the latter biggest

3. Bamboo

2910

[illegible]

Stems long, much, base
with well marked petiole
and per or small oval
ridge.
Leaves 1-2 mm. of culm
short -
Rhizome with short
neck, (repl. type) -

Black. ~~stems~~
 bulbous with small hole
 thick wall, in buds
 1/2, upper bracts and
 upper part solid.
 Photo: some br. white &
 colds -
 FPA: 2 leas. & buds -
 buds are: ~~vigorous~~, color
 dark complement.

Aug. 3

2911

Bambusa?

B. capitata (var. m. 28)

the other? , hard to say
what it is - looks like
flame like the other
but in detail all are
f.

Small clump growing at
edge of rice (which is
periodically inundated) near
growing from inside
pouch the same for the
other bamboo (2910) -
thin tip bamboo, from
bore curved and very
up over the trees, very
thin smooth long pointed
sheath smooth, blade
long reflexed, narrow
pointed, in some places
when very dry erect,
or then deciduous.
long, ribby oval retic.
below internodes smooth
not very long, thick walls

and small lumen when
mature a dry - jagged
solid but brittle with
fibre (look like small holes)
light. dense, strong -
One node with upper
ridge marked. Branch
single - mostly 1
branch in nodal place
that branch gives one
or two on the side.
Branch complement high position
between ridges.
Leaf complement, leaf of
several leaves. Blade
long, & narrow, not
petioled a long ribby oval
retic.
New shoot pointed, 2 -

Photo: B & W - color

FPA: leaf, piece of culm &
nodes (2 v.)

rhizome, culm sections, small
complement.

found late about 2 hrs
from the river, along
joining at edge of river
Plant not very tall ca. 6 ft
(Aulorhiza?)

Aug. 4

282912

Bar, Rio Arriba, ca. 3600m
80 from Manos - El Carro.
In road. A
gentianaceae

Sepal white, near edge of river
white 5-merous flowers.

A. Acletochloa 2913

vine
thin, (tapering), silvery green
in shade? near edge of river

Pteridophyte

2914

epiphyte on tree near edge
of river.

115.125

Agave americana 2915

growing at edge of river,
(small type of plant,
seen up to 70 cm)

F.A.A.: leaves.

Onagraceae 2916

Epiphyte, flowers green white

Scutellariaceae 2917
Althaea

Saprophyte, no leaves, flowers
iridescent. (1 specimen with 2 plants.)

Leguminosae ^{minorsae} ~~Wittrock~~ 2918

Tree up to 10 m, flowers
white, common along river

Althaea *Althaeaceae* 2919
Viola elongata (Bth.) Wats.

Small tree, ca 6 m. narrow
leaves

Leguminosae 2920

Ornithoglossum?

Tree, ca 12 m. Flowers pink
to white.

Apocynaceae

2921

Small tree, about 8m with
orange yellow fruits, at
edge of river

Myrtaceae

2922

Virola calophylla Warb.

Shrub tree at edge of forest
about 6m. (wide) leaves

Combretaceae

2923

Tree on hill at edge of river
very young flower buds, but
open ~~very~~ flowers (very
small)

Myrtaceae

2924

Virola elongata (Bth) Warb.

Small tree at edge of river

Leguminosae *Cedrela*

2925

Cedrela

Tree ca. 12-15m at edge
of river. Flowers white.

Aug 5

2926

Am, Rio Nari, between Maracaibo
& Baracaras road and Inocencia
Water Falls. (about 2 km by road?)

(T. above?) n. sp. - (M. sp.)

One clump at edge of river
with some shoots. Young
and also several new shoot
leaves sheath persistent, when
very young down in places, on
old leaves half persistent, covers
by appressed down. First

leaves. When sheath old
they most of them fall
leaves strong and flexible
not exit by curved on the
base and ending over
trees. When young leaves fall
in center with fifth, well
are thick. When old the
culm is hollow in center.
Blade of culm leaf strong
and reflexed, base dentate
but in new shoot very thin

more time a few are erect,
and then later, reflexed. Long
and later, silky and called like
older.

Mothers. From above $\frac{1}{3}$ from
ground start growing, one
branch per node. Internodes
rather short and most all
of them have a few
shoots give only branch
complement of 1, 2, 3, 4, 5
at the end of shoot. They
give two small shoots only
with leaf complement.
Flowers: head of pseudopiths
apparently smaller. On nodes of
a shoot, head of pseudopiths
grows for more than a month
in core. Spikes with more
leaves only on the edges of leaves
or so. (The other side from Trans-
o-eye look up at all cores by one
leaves. a great complement on the
complex.

FRA: flowers, leaves & buds, 1/3
of new piece of culm with
buds. (no shoot here, only 2 branches)

Malpigiaceae

2927

Climber over tree at edge of river
with fruit only.

Sapotaceae

2928

Tree ca. 7 m along river
in fruit only.

Leguminosae Mimosa-like 2929

Tree about 7-10 m. along
river, common

Lycium-like sp.

2930

Shrublet on bank of river
not sure if fig tree, both
in fruit.
FRA: whole in flower.

Legum. Cercopithecus

2931

Swartzia?

Tree about 12 m. high
with flowers yellow and
with perfume.

Mimosaceae

2932

Viola elongata (B.) Wats.

Tree about 5 m.

Dioscoreaceae

2933

climbing over the edge
of river.

~~Celastraceae~~
Euphorbia stylium

2934

in woody ceps over tree at
edge of river

Leguminosae

2935

Tree along river about 6-7
m

Chrysobalanaceae

2936

Big Tree along river, ca. 10m
flowers white

Annonaceae

2937

Tree about 8m along
river, big flowers pale yellow

Argemoneaceae

2938

Tree ca. 10-12m with very small
flower & red fruit.

Guttiferae

2939

Tree about 6m with young
big buds.

Aug. 6.

2940

Ann. Rio Mucuri ~~to~~ ~~the~~
~~near~~ ~~the~~ ~~road~~ ~~to~~
~~about 400m beyond gate~~
~~(115 km from camp)~~

Moraceae

Coronaria

Tree at edge of river
very small pinky flowers.

Leaves & flowers not nearly
open.

Apocynaceae

2941

Small tree at edge of river
white, perfumed flowers
very delicate, good perfume.

Orchidaceae

2942

Small epiphyte with yellow
flowers

Orchidaceae

2943

Epiphyte, long leaves hanging
from branches of tree. Flowers
yellow with brown spots.

Euphorbiaceae ?
Diana -

2944

Small tree ca 8 m at edge
of vate. Small ivory flowers

Lepurim -
Dioecious ?

2945

Stems of flowers like

Lepurim. Kindschense.
Lupa

2946

Tree ca 6 m flowers white

Euphorbiaceae
Pers ?

2947

Shrub ca. 1.5 m. Flowers
ivory white

Andropogonaceae

2948

Creeping over trees near concrete.

Burseraceae

2949

Small tree about 3-4 m. Small
ivory flowers

~~Utriculariaceae~~

2950

Nymphaeaceae

Labomba

floating on water, near water,
fall, abundant, yellow
flowers.

2951

Xyridaceae

2951

small plant on rocks by the
water fall.

Podostemaceae

2952

Renetic, by the water fall, leaves
attached to rocks, floating in
below water.

Scott Mori

Elaeocarpaceae

53

Ternstroemiaceae (Theaceae)

54

Myrtaceae

Lecythidaceae

2954

the
~~2954~~

2955

Epiphyte on tree.

BAHIA, BRAZIL

Mun. de Mucugé, Serra do Sincorá, 29 km S of Andaraí on road Andaraí-Mucugé. Elev. 1050 m. Common in plateau, near top of mountain. Forming dense, small clumps in sandy soil between rocks. Flowers light violet in color, stamens and stigmas bright yellow.

9 May 1976

Cleofé E. Calderón, Talmón S. Santos, and Lyselson B. de Oliveira

2415

Collected under the auspices of the Smithsonian Institution, National Geographic Society, and Centro de Pesquisas do Cacau (CEPLAC)

~~Utriculariaceae~~

2950

Nymphaeaceae

N. abombar

Flowering on water near water,
fall, abundant, yellow
flowers.

2951

Xyridaceae

2951

Small plant on rocks by the
water fall.

Podostemaceae

2952

Renetic, by the water fall, leaves
attached to rocks, floating in
below water.

Melastomataceae

2953

Niconia pubipetala

Small tree, about 4 m, at
edge of water.

Eriocaulaceae

2954

Tomina cf. fluvialis Aubl.

Aquatic, on rocks by the
water fall. (~~not identified~~)

Loranthaceae

2955

Epiphyte on tree.

Ougniaceae

2956

Epiphyte, beautiful green
flowers with brown spots.

Convolvulaceae

2957

Growing on wet rocks by the
edge of water fall (very small plant).

Brassicaceae

2958

Growing on rocks at edge of
water fall

Convolvulaceae

2959

Growing on wet rocks, trees
at edge of water fall.

Myrsinaceae

2960

Arboreal of 3 m high at
edge of water fall.

Legumin. Corolliniferae
Insectivore.

2961

Tree, about 7 m. high - flowers
white with perfume
n.v. - "sassafras"

Melastomaceae

2962

Pristia racemosa

At edge of 'jagap' by road.
Fls. white. Flowers white
with stems like.

Utricularia

2963

Epiphyte, small, with yellow
flowers.

Bombacaceae

2964

Small tree at edge of

Lonicera

2965

tree at edge of water. Flowers
pale yellow, perfumed.

Sept 7.

2966

Fls. *Poa annua*, between ferns to tree
& cascades to Inca's water fall

Abundant (not far from camp) right
side. Small stone wall with
water running over

Arthrocladia sp.
seedling.

Very abundant, growing
beside road on rocky
slope. Small plants, flowers
on the spots. (water holes) Most of
them rather young, with cotyledons still
attached. Few with 2 roots joined.

2968

Small tree at edge of water
with very young flower buds

Lorantaceae

2967

Epiphyte on tree over water
Flower like pink

Anacard

2969

On rocky, moist slope by
the river - (unclear)

Arthrostylidium

2970

At one spot of the forest at
edge of river with 2-3 clumps
of mature plants, some
lvs in flower, see a flower
hard to find fresh in flower.
But many, many seedling
very young carpet on
the forest floor. Soil rocky, white
between rocks on a level. Just
rock wall with water trickling
along it.

Plant mature climbing a
large tree, probably
no more than 6-7 m
high. Mature culms ~~are~~
~~are~~ less than 1 cm in diam.
Some short stems by
a lot. Spikes small but hard to
see any complete a young.

FRA: flowers. no photos

It looks the same we collected
early up stream in the first
camps - and almost everywhere

Laurenciaea

2971

Small tree with beautiful pink
flowers on the stem.

Guthriea

2972

laraipe

Tree ca. 6 m. at edge of forest.
Flowers with white petals &
many stamens. Petals fall
very easily early.

Heliconia

2973

Miconia rugosa
about 6 m.

Tree with big leaves and
as spikes of tall pink flowers with
violet stamens.

Banana

2974

Growing on high river bank.
Small leaves type - (2 or 3)
"terre firme" forest

Heliconia

2975

Miconia marginata

Shrub ca. 1 m. on forest at
edge of river, "terre firme
forest"

Cyperaceae

2976

Growing in 1st forest, "terre firme"
along river. Dominant in forest
is a sp. of *Arthrostylidium*.
Forming thick clumps.

Arthrostylidium

Camp 8 2977
Río Urubá, Setema River to
Lago x Lacuna Water Fall, igarapé
tributary with water fall.
Pteridophyte

Bolus Big fern almost
type, about 2 m high in
rain forest at edge of igarapé
tributary of river.

Pteridophyte Selaginellaceae 2978
Selaginella
Common in wet forest along
stream tributary of main
river (type Selaginella).

Melastomataceae 2979

~~Plants~~ Plants with red flowers
in rain forest along stream.

Pteridophyte 2980

In wet, dark place of
forest along igarapé, tributary
of main river.

Pilea goellii 2981

In wet forest along igarapé
tributary of main river, slope
with rocks and sandy
soil. Growing with ferns and
other plants in flower.

Pteridophyte 2982

Epiphyte, growing on wet bark
of a tree trunk. In
forest along igarapé.

Anacard

2983

growing at edge of grassy
forest of ~~mountain~~ near, not
dark place - ~~unusual~~

US, K, WIS

Ruellia esenbeckii

2984

(Humb.) C. & S.

~~Abundant~~ on rocks at edge
of river near edge of road just
growing between ~~mountains~~

FAA - flower & leaves

3:1 - " " "

~~Canavalia~~

2985

~~collected at K. ? or it was
lost~~

Zingiberaceae

2986

(same loc. a date & obs. the
Anacard ^{relat.} collected in
Jociparano, (see no 2788)

Growing in terra firme ^{forest} near
rio Jociparano, Flowers red -

Bambusa

2985

collected by J. J. ...
Dragon River ^{tributary} near Huanan
about 1 hour (?) above Huanan

Medium size bamboo, ca. 3-
4 m, ^{young} near river, to
culm with thick walls
about 0.8 - 0.9 cm thickness
culm leaf ~~stiff~~ persistent
persisting late in place
culm leaf blade very small
All plants flowering -
Oct. & al. - Aug. 18, 79

Um fazendeiro tem uma
vaca e a mãe do fazen-
deiro é também o pai
da vaca.

Aug. 30.

KC 79-66

Bandeira (Guaia)
Arr. Rio Negro

Igarapé do Jaraguá entre Manaus e
Arquipélago das Anavilhanas

Young near the edge of pits in
small stems, below leaf
on petiole, ca. 5-6 cm, leaves
surface covered with thick
wax, only small leaves
inside. No old region with
white bands above & below
lower ridge. Very young
bands. In lower part of
culm strong & curved but
short spines develop at nodes
in symmetrical pattern above
middle when branches start
developing the secondary growth
shows a unilateral behavior
only one side of main axis
produces several, as the
other side only 1 spine.
No new shoots seen, but

Plum color. Small. Found on the
ground: black plants. Short
triangular.
Black to purple leaves
medium small herbaceous.

K 79-89

Sept. 3,

On Rio Negro, right bank,
2 hours below Tapachula.
"Equis Tetradleum",
on granite outcrops at road
(Olyra) longifolia.

Found in the water at edge
of river, 100 yds. from
bank, up to 1.40. First
of flowers, similar to
the one collected in the
marsh.

FPA: Lr. & inflorescence

K 79-127. Same loc. as before
and next day Sept. 4

Panicum sp.

Growing in the beach with
bromeliaceae and Cyperaceae

Sept. 4, 1979

R 79-135

Bamboo

Hum, Rio Negro, Yacape, Dava
near Santa Isabel (Tapurucuro)

Young in ipapi forest
along Yacape. Small clump
completely in shade. Culm
lean on vegetation, up
to 15 cm \pm . Heavy walls
with small brown
spots of internode. Furrow
enough, but furrow
rather short. Culm
up to 1.3 cm \pm culm sheath
rather persistent or last
persistent. Blade ^{on} the culm, only
a small Δ , etc.

Few spines on one side
of both culm.

Internode \pm thick \approx 4-6 \pm

Phloem \pm top pseudophloem.

lets, but strong growth

differences in height, some short

2 other much longer.

Not many 2e pseudophloem

parts. More some
new shoot found
looks like the of that
several collected near
Manaus

Bulky material: internode & shoot
complement.

FAA: 11 & pseudophloem.

We saw this bamboo also found
& in forest, but, most very
in the Rio Branco, near
Santa Isabel.

79-136

Sept 5

Am, Rio Negro, mouth of
rio Cauburi, above Santa Isabel
(Tapurucana).
(ca 10 km above Tapurucana).
Pisonia *sp.*

Most common on terra
firme forest, near edge
of rio Negro. Mostly all
plants yellowish, green
in some the middle of
of *Pisonia* (not in fl.)

FRA: 11. x night

79-140

Sept 5

Rio Negro, mouth of rio
Cauburi, above Santa Isabel
(Tapurucana)

Tabernaemontana *paniculata*

On terra firme forest
near edge of rio Negro.

79-159

Cratogeomys *sp.*

Same loc. ↑
(each were with spent the
night?)

lacheine to Butu
no ipirape' Piraiasuaru
" Piraiasuaru
affluente to Curicuary

78-177

7 Sept.

Bamboo (Juncus) ?

No Negro, near mouth of rio
Curicuary.

Growing near the edge of river,
on steep foot. Forging
rather small clumps. Culms
arching over space two up to
20 dm or more, no spines
internodes smooth, with
thick waxes, when in use.
Internodes rather short.
Leaves look thick, most
with short, narrow
A blade.

FAA leaf.

bulky: other pine & grasses?

79-189

Sept 8, 78

Proville (see section 2)

Am (Rio Negro) *Passiflora* *Piracantha*
 ra, tributary of the lower
 Curicuary; Leticia to
 Butte? It is

Abundant on rocks by the
 water fall - growing between
 rocks & some stricillaria
 In some places it is small
 & short as usual, but
 in higher rocks is somewhat
 and trailing over rocks for
 about 20 ft or more.
 Very velvety, thin leaves.
 Plants all in flower. Probably
 the trailing plant on + other
 noted places? beautiful!
 Forming carpet on large rocks
 seen also in some grassy
 mts. along the irrigation
 Also growing on sand about the
 works!
 F.A.P.: only 1 not full.

79-190

Sept 8.

A. *Passiflora* *Curicuary**Arthrotylidiaceae*

Growing in low forest on
 sandy soil near edge of
 river.

Climbing shrub, abundant
 in the forest over trees &
 shrubs. Bark very velvety
 thin, probably 60-80 cm +
 Very asperous. Bark leaf
 with erect & black.
 Foliage velvety, black
 narrow, short dense state
 look like the one collected
 in the Amazon.

F.A.P.: Lr.

Bulky material: fruit of unim.
 garden?

79-191

Parsons

Sept 8

Am. Woods via Curicuary

Abundant in low forest along
river, on sandy soil. (Sept 8)
near the edge, many
plants seen but just one
patch with flowers.

FAS: No. 1 inflores.

K. 79-209

Sept. 9

R. Rio Maria, ca. 30 Km
above mouth - near village
of Macabeta.

Rothmannia

Climbing bamboo growing in
forest on high banks along
river, with sandy soil of
banks thin, less than 1 m
but strong & flexible as
veg. & trees \pm 6 m. Forming
a large, dense clump about
1 m high. Internodes &
culm ~~the~~ leaves very smooth.
Internodes with thick nodes &
small hollow centers.

Culm leaves very smooth
triangular with no external
demarcation of blade - only
for inside see text. Blade
ending in a long throat
like tip.

Leaves rather large - (near top
this is in flower!)
Sheath rather persistent

or late seedlings when buds
develop. Culm leaf appears
and long transparent with
most but acquisition of smooth
blade (is this the most common
one in the genus, A.?) and
oral setae, one side of
leaf overlapping, especially near
base. And with ^{small leaf} ~~small leaf~~
like expansion. Culm leaf
with a collared like structure
(the) near base,
culm up to 1 cm or little less
strong & flexible, with little
100 in dents or more in
some parts. It's near to
produce more branches x b.c.
than the other sp.
Culm - nodes filled with pith in
some part of plant.
We saw this bamboo in very
places along the river, ^{near} ~~near~~
on the side opposite the village
(right bank of river).
F.H.P. 1st piece of culm & bud,
bulky material: parawood 2

piece of culm
and photo

79-211

Sept. 9.

Am. Rio Marie, ca. 35 km
above mouth of river.
(opposite near cascade (or rapids)
settlement)

(Elyse) longifolia type

Large clumps growing in the
water of rapids, immense
plant with a stalk ± 2.5
m. aerial, with a little
branching from several nodes
below top and flowering
proportionally from those nodes
with lateral series from each
node.

Top leaves type of *O. longifolia*
at top of plant.

FAA: has a uniflorous

79-222

Sept. 10

R. Rio Marie, ca. 40 km
above mouth of river
(some km above cascade
near village) on right side
of river (opposite to village side)

Arctostaphylos sp?
(uniflorous)

Same sp. as the first Arct.
collected in this river
Beautiful, hanging from
trees at the edge of river
but when in fruiting
ground (possibly in water)
This is a sp. type of fruit
All plants in the report
flowering but not seen in
other places. Infl. \pm Arctost.
type of apical raceme? but
apical 1-flower with very
long, thread-like rachis like
Arctostaphylos, like *Arctostaphylos*
The structure \pm like *Arctostaphylos*
too, possibly compressed.

Large, with 2-3 glumes -
short, at base, very short
(The whole infl. about looking
like a true spike, and
extending of main axis
and uppermost spike
very well developed.
Collected a lot of material
and for herbarium &
lots of seeds.
(invol. as 209)

FAR: 2 vol. 1 br. & infl. -
long. 1 v. infl.
3: 1 - 1 v. infl.
Bulky, main culm leaves only
Notes: 6 x 10 - a lot of
Ectocarpus 64 -

79-236

Sept 11, 78

Arthrocladum

Rm. Rio Tea, 40 Km above mouth
"Bacuri" village -

Common at edge of river, in
these gaps forest, some
plants growing in the water.
Small plants, probably a
rather young population? often
flowering some few years ago?
but weak, rising up to
3-4 m \pm blades rather
large -
but type of river, in
some places changing
to damp pine slopes
but then no bamboo seen?

79-243

Sept. 12

Bambusa

(¹)

some loc. of *gigantea*

(Santosa in flower collected in the morning)

(Same clump growing at edge of woods in *ipogon* forest, base of plant *distichly* *imbricate*.

Plant up to 16 m. ±.

Bulb smooth, as above, and no spines. In some nodes (*juv*) one of the lateral buds pointed looking like a thorn.

Bulb complement typically *Bambusa* style: *lateral* *axils* *strongly* *dominant* with thickened, as an oval bulb, *upward* *and* *divergent* from *center* in a wide angle, some time up to 90° or 50°.

Secondary *axis* coming at 7 level of the base of 1° one, and also *growing* *spreading* out

in sharp angle and away
from point are
kulan with very thick waxy
and small flowers.
Living on trees. Flowers
prolonged opening and
and of leaf compound.
No new shoots found

no photo

F.A.A. to a some point.
no buds?
Barley: culm - leaves & broad
leaves.

K. 78-252

12 Sept.
(Afternoon)

Olyra? sp.

Area

Area, Rio Negro, Ilha
Tamboraquara, Tambores
near Santa Isabel to Rio
Negro (Tapuruquara)

Growing in beautiful tall
forest, fine, primitive? if so
extinct, periodically invaded
but. Tall ovoidal flowers,
abundant, growing as an
Panicum-like clump here.
Strong rhizome with
and alternating divergent
to one side & the other
(as the one I collected from
O. Stanley).
Sm. fl. of several sp. for
terminal node and
some (1 or 2?) below.
Long an ending in sp.
white. 7 specimens

K. 78-251

Sept 12

Same as before

~~Same as before~~

with very strong, more than
before, of plants.

Herbicide seems to be
killing off some of the
corking the whole area, better.

K. 78-251

Sept. 12

Same as before

Same as before?

Long stems, tip to angle 1.

Beautiful climbing bamboo,
up to probably 12' or 15'
m, leaning and climbing
over trees. Culms straight
with thick walls, with
rather short internodes.
Leaf with the 1 and
dentulous glaucous
leaf internodes smooth
Typical bamboo growth
complement. no young
new, Big (mosses)
leaf complement with
long & wide leaf glaucous
Abundant in tall forest,
transition? for spots in
large island.

No photo -

FRAA: 15- only

bulky material: color paper

& paraphs -

May 15

2492

Reserva Dube, near Manaus,
Pariana

growing scattered in rain forest
few in flower; the inflorescence
young produced in a upturned
shoot.

Pariana

2493

growing in ^{rain} forest, ^{near} Manaus, ^{forest} of
not abundant.
few in flower.

(This two ~~plants~~ collected with
Osmarino)

May 22.

2494

Agua, Reserva Dube, near
Manaus.

Pithecolobium.

growing ^{abundantly} near the ~~river~~ not too
far from the stream.

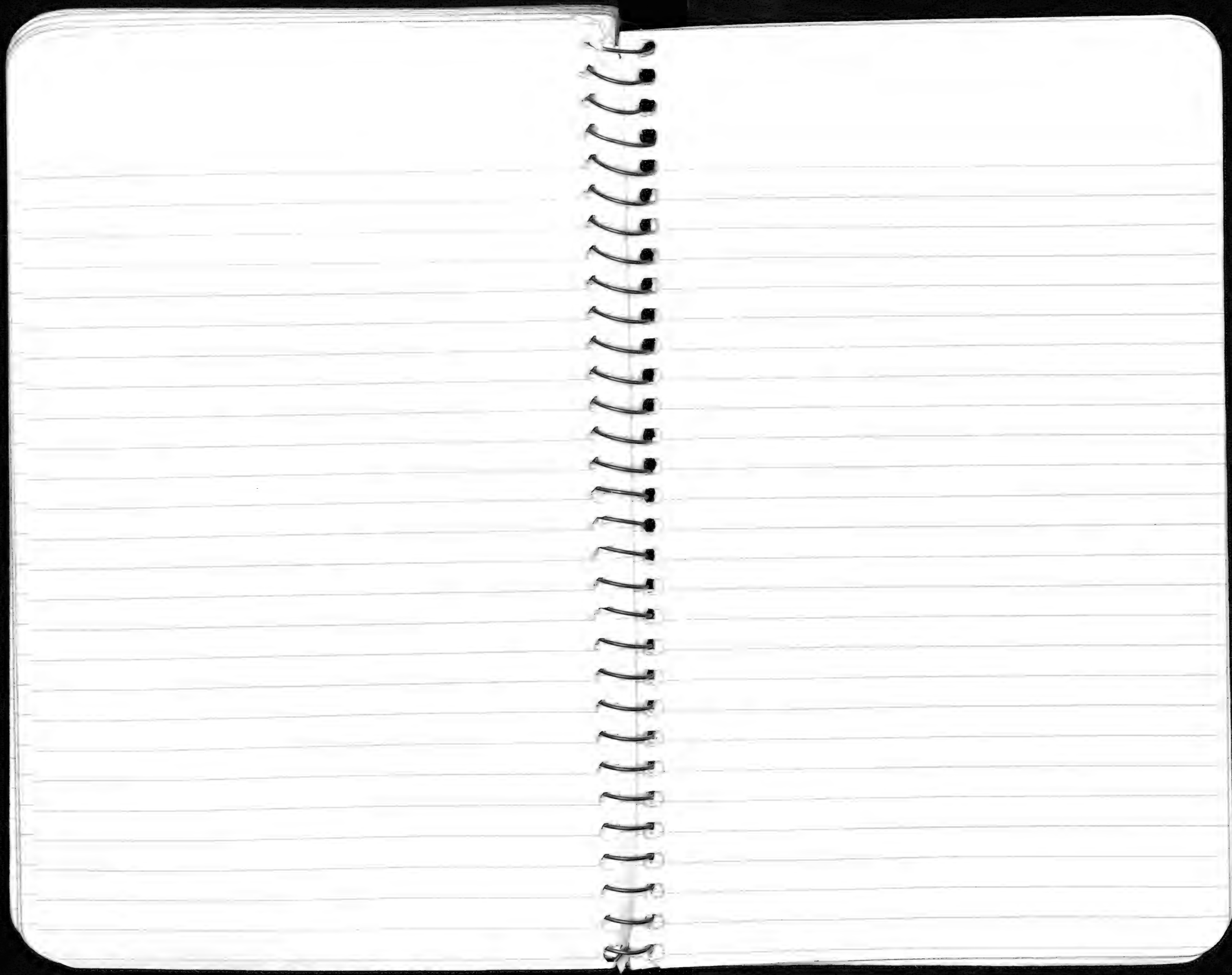
collected with Jose Ramos.

2495

Schmutter?

growing in rain forest, near

the road to the stream.
(collected with Joe's names)



- 2492 - *Poniana* (w. *Chamaecrista*)
2493 *Poniana* (w. " "
2494 *Pteris* *symplocos* w. *pre'Ramus*
2495 *Tournefortia* ?

bulky material

2519 1I, 5G, -	2I, 4G, -
"2706" seedling, 1R	seedling, 3R
2733 1I, 3G, -	1I, 3G, -
2754 2I, 4G, 1R	2I, 3G, -
2755 2I, 6G, 1R	2I, 5G, 1R
2756 1I, 3G, 1R	1I, 2G, 1R
2771 1I, 2G, -	1I, 2G, -
2780, 3G, -	1I, 3G, -
2782 1I, 3G, -	1I, 3G, -
2783 3I, 4G, 1R	3I, 5G, 1R
2784 no bulky	
2813 1I, 3G, -	2I, 3G, -
2818 2I, 4G, -	2I, 4G, -
2829 1I, 4G, 1R	1I, 3G, 1R
2833 2I, 3G, 4S, 1R	3I, 3G, 2S, 1R
2846 1I, 4G, 1R, -	1I, 3G, 2R
2867 2I, -, 1R	2I, -, 1R
2870 1I, 4G, 1R	2I, 4G, 1R
2873 2I, 2G, 1R	2I, 2G, 1R
2874 2I, 3G, 1R	2I, 2G, 1R
2894 2I, 4G, 1R	2I, 4G, 1R
2910 2I, 5G, 1R	2I, 5G, 2R chis
2911 2I, 5G, 2R	2I, 4G, 1R
2926 -, 3G, -	-, 4G, -
2966 & 2970 no bulky	
2985 HE - 1R, 1R	2I - 1R

K79-66 IN, 3I, 2G, T, MS 2I, 2G, -

- 89 IN

127 IN

135 IN, 2I, 2G, - MS 2I, 2G, -

136

140

154

177, 3G,

189

? 190

191

209 2I, 5G, 1R 2I, 5G, 1R

211

222 1I, - - 1I, - -

236 2I, 2G, 1R 3I, 2G, 1R

243 4I, 7G, - MS 3I, 7G, -

251 3I, 4G, ~~MS~~ - 2I, 4G, ~~MS~~ -

252

210 2I, 5G, -

3I, 5G, 1R

2807 IN (4) MS (4)

2808 IN (4) MS (4)

2809 IN (5) MS (5)

2810 IN (6) MS (6)

2811 IN (5) MS (5)

2812 IN (4) MS (4)

2813 IN (4) MS (4)

2814 IN (4) MS (4)

2815 IN (2) MS (2)

2816 IN (2) MS (2)

2817 IN (3) MS (3)

2818 IN (4) MS (5)

2819 IN (3) MS (3)

2820 IN (4) MS (6)

2821 IN (3) MS (3)

2822 IN (5) MS (5)

2823 IN (3) MS (3)

2824 IN (3) MS (4)

2825 IN (4) MS (4)

2826 IN (9) MS (4)

2827 IN (2) MS (2)

2828 IN (3) MS (4)

2829 IN (5) MS (5+)

2830 IN (5) MS (2)

2831 IN (4) MS (10)

2832 IN (4) MS (3)

2833 IN (5) MS (7+)

2834 IN (4) MS (11)

2835 IN (6) MS (6)

2836 IN (3) MS (5)

2837 IN (5) MS (5)

2838 IN (5) MS (6)

2839 IN (5) MS (10)

2840 IN (5) MS (5)

2841 IN (4) MS (6)

2842 IN (2) MS (2)

2843 IN (2) MS (2)

2844 IN (3) MS (3)

2845 IN (1) MS -

2846 IN (5) MS (8)

2847 IN (1) MS -

2848 IN (4) MS (5)

2849 IN (7) MS (6)

2850 IN (3) MS (3)

2851 IN (2) MS (2)

2852 IN (1) MS (1)

2853 IN (2) MS (3)

2854 IN (4) MS (4)

2855 IN (2) MS (2)

2856 IN (1) MS (7) not lost?

2857 IN (4) MS (12)

2858 IN (4) MS (5)

2859 IN (1) MS (1)

2860 IN (1) MS (1)

2861 IN ⑥	MS ⑥	2888 IN ②	MS ②	2915 IN ①	MS ②	2942 IN ①	MS ①
2862 IN ①	MS ①	2889 IN ③	MS ⑤	2916 IN ①	MS —	2943 IN ①	MS ①
2863 IN ②	MS ②	2890 IN ④	MS ⑥	2917 IN ①	MS —	2944 IN ②	MS ⑤
2864 IN ⑤	MS ⑤	2891 IN ③	MS ④	2918 IN ④	MS ⑤	2945 IN ⑤	MS ⑤
2865 IN ⑤	MS ⑤	2892 IN ③	MS ④	2919 IN ④	MS ⑤	2946 IN ④	MS ⑥
2866 IN ⑤	MS ⑤	2893 IN ③	MS ⑤	2920 IN ⑤	MS ⑤	2947 IN ④	MS ⑥
2867 IN ⑤ ^{int.}	MS ⑧	2894 IN ⑤ ^{int.}	MS —	2921 IN ⑤	MS ⑤	2948 IN ③	MS ③
2868 IN ③	MS ⑤	2895 IN ⑥	MS ⑥	2922 IN ⑥	MS ⑥	2949 IN ⑤	MS ⑤
2869 IN ①	MS —	2896 IN ①	MS ①	2923 IN ③	MS ④	2950 IN ⑤	MS ⑥
2870 IN ⑤	MS ⑥	2897 IN ④	MS ④	2924 IN ⑤	MS ⑤	2951 IN ④	MS ④
2871 IN ②	MS ③	2898 IN ①	MS —	2925 IN ③	MS ③	2952 IN ⑤	MS ④
2872 IN ⑦	MS ⑦	2899 IN ①	MS ①	2926 IN ⑤ ^{int.}	MS ⑧	2953 IN ③	MS ⑤
2873 IN ⑤ ^{int.}	MS ⑦	2900 IN ②	MS ③	2927 IN ⑤	MS ⑥	2954 IN ⑤	MS ⑥
2874 IN ⑤ ^{int.}	MS ⑦	2901 IN ③	MS ④	2928 IN ④	MS ⑤	2955 IN ①	MS ②
2875 IN ①	MS —	2902 IN ④	MS ④	2929 IN ⑤	MS ⑥	2956 IN ①	MS —
2876 IN ③	MS ⑦	2903 IN ③	MS ③	2930 IN ④	MS ④	2957 IN ⑤	MS ⑤
2877 IN ④	MS ⑤	2904 IN ⑥	MS ⑤	2931 IN ④	MS ⑤	2958 IN ②	MS ①
2878 IN ③	MS ③	2905 IN ⑤	MS ⑤	2932 IN ④	MS ④	2959 IN ⑤	MS ⑤
2879 IN ①	MS ①	2906 IN ⑥	MS ④	2933 IN ⑤	MS ⑥	2960 IN ②	MS ②
2880 IN ②	MS ②	2907 IN ②	MS ⑤	2934 IN ③	MS ④	2961 IN ④	MS ⑤
2881 IN ①	MS ①	2908 IN ②	MS ③	2935 IN ⑥	MS ⑤	2962 IN ④	MS ④
2882 IN ③	MS ⑤	2909 IN ⑥ ^{int.}	MS ⑧	2936 IN ④	MS ⑥	2963 IN ①	MS ①
2883 IN ③	MS ⑦	2910 IN ⑤ ^{int.}	MS ⑧	2937 IN ⑤	MS ⑥	2964 IN ④	MS ⑤
2884 IN ②	MS ③	2911 IN ⑤ ^{int.}	MS ⑥	2938 IN ④	MS ⑥	2965 IN ⑤	MS ⑤
2885 IN ①	MS ②	2912 IN ①	MS ①	2939 IN ④	MS ⑥	2966 IN ⑤ ^{int.}	MS ⑥
2886 IN ④	MS ⑤	2913 IN ①	MS ②	2940 IN ⑤	MS ⑤	2967 IN ③	MS ②
2887 IN ③	MS ③	2914 IN ②	MS ②	2941 IN ④	MS ⑤	2968 IN ⑤	MS ⑤

Scapinella, entire material left for study
for Keise

2969 IN ①	US -	K79-177 IN ④ ^{int. B}	MS ⑤ ⁺
2970 IN ④ ⁵	US 5-6 ⁺	"-189 IN ⑤ ^{int.}	MS 9 ⁺
2971 IN ④	US ⑤	"-190 IN ④ ^{int. B}	MS ⑤ ⁺
2972 IN ④	US ⑥	"-191 IN ③	MS ⑤ ⁺
2973 IN ⑤	US ⑥	"-209 IN ⑤ ^{int. B}	MS ⑥ ⁺
2974 IN ①	US ①	"-211 IN ⑤ ^{int. B}	MS 7 ⁺
2975 IN ③	US ⑤	"-222 IN ⑤ ^{int. B}	MS 8 ⁺
2976 IN ③	US ③	"-236 IN ⑤ ^{int. B}	MS 8 ⁺
2977 IN ④	US ⑤	"-243 IN ⑤ ^{int. B}	MS ⑥ ⁺
2978 IN ⑥	US ⑤	"-251 IN ⑤ ^{int. B}	MS ⑥ ⁺
2979 IN ①	US ①	"-252 IN ⑤ ^{int.}	MS ⑥ ⁺
2980 IN ④	US ③		
2981 IN ③	US ②	(total marks collected with	
2982 IN ③	US ②	KK was ①89)	
2983 IN ①	US -		
2984 IN ⑥	US ⑤		
2985 IN ⑤ ^{int. B}	US ⑥ ⁺		
2986 IN ②	US ②		

K79-66 IN ③ ^B	MS ④
"-89 IN ⑤ ^{int.}	MS ⑤
"-127 IN ④ ^{int. B}	MS ⑤ ⁺
"-135 IN ⑤ ^{int. B}	MS ⑥ ⁺
"-136 IN ⑤ ^{int.}	MS ⑧ ⁺
"-140 IN ② ^{int. B}	MS -
"-159 IN ④	MS ⑤

2591 IN ②	MS ②	2618 IN ③	MS ④
2592 IN ④	MS ⑤	2619 IN ④	MS ⑤
2593 IN ①	MS ②	2620 IN ④	MS ⑤
2594 IN ③	MS ④	2621 IN ③	MS ②
2595 IN ④	MS ⑤	2622 IN ①	MS ①
2596 IN ⑤	MS ⑥	2623 IN ①	MS ①
2597 IN ③	MS ④	2624 IN ⑤	MS ⑥
2598 IN ⑤	MS ⑥	2625 IN ③	MS ⑤
2599 IN ①	MS -	2626 IN ①	MS ②
2600 IN ②	MS ②	2627 IN ①	MS -
2601 IN ④	MS ⑤	2628 IN ②	MS ②
2602 IN ④	MS ⑤	2629 IN ②	MS ②
2603 IN ⑤	MS ⑥	2630 IN ②	MS ②
2604 IN ④	MS ④	2631 IN ③	MS ⑤
2605 IN ②	MS ②	2632 IN ②	MS ③
2606 IN ①	MS -	2633 IN ③	MS ③
2607 IN ①	MS ②	2634 IN ④ ⁴	MS ③ ⁶
2608 IN ⑤	MS ⑥	2635 IN ⑤	MS ⑤
2609 IN ⑤	MS ⑤	2636 IN ③	MS ④
2610 IN ⑤	MS ⑥	2637 IN ③	MS ③
2611 IN ④	MS ⑤	2638 IN ③	MS ③
2612 IN ③	MS ⑤	2639 IN ④	MS ⑦
2613 IN ④	MS ⑤	2640 IN ①	MS ①
2614 IN ①	MS ②	2641 IN ④	MS ⑤
2615 IN ①	MS ①	2642 IN ④	MS ⑤
2616 IN ③	MS ⑤	2643 IN ①	MS ①
2617 IN ③	MS ②	2644 IN ④	MS ⑤

2645 IN ①	US -	2672 IN ③	US ④
2646 IN ⑤	US ⑥	2673 IN ②	US ③
2647 IN ④	US ⑤	2674 IN ①	US -
2648 IN ④ ⁺	US ④ ⁺	2675 IN ④	US ⑤
2649 IN ②	US ②	2676 IN ②	US ②
2650 IN ①	US ①	2677 IN ④	US ④
2651 IN ③	US ②	2678 IN ③	US ③
2652 IN ②	US ②	2679 IN ③	US ⑤
2653 IN ②	US ①	2680 IN ⑤	US ④
2654 IN ③	US ⑤	2681 IN ④	US ④
2655 IN ③	US ③	2682 IN ④	US ⑤
2656 IN ③	US ②	2683 IN ②	US ②
2657 IN ④ ¹	US ④ ²	2684 IN ④	US ⑤
2658 IN ④	US ⑤	2685 IN ④	US ⑤
2659 IN ①	US ①	2686 IN ②	US ③
2660 IN ①	US -	2687 IN ④	US ④
2661 IN ②	US ③	2688 IN ③	US ④
2662 IN ③	US ③	2689 IN ⑤	US ⑤
2663 IN ①	US ①	2690 IN missing	US ?
2664 IN ①	US -	2691 IN ⑤	US ⑤
2665 IN ①	US ①	2692 IN ④	US ⑤
2666 IN ①	US ①	2693 IN ⑤	US ⑥
2667 IN ③	US ③	2694 IN ⑤	US ③
2668 IN ③	US ③	2695 IN ③	US ③
2669 IN ①	US -	2696 IN ⑤	US ⑥
2670 IN ⑤	US ④	2697 IN ⑤	US ⑤
2671 IN ①	US ③	2698 IN ④	US ⑥

2699 IN ④	US ⑥	2726 IN ③	US ③
2700 IN ③	US ④	2727 IN ⑤	US ⑥
2701 IN ③	US ④	2728 IN ④	US ⑤
2702 IN ③	US ③	2729 IN ⑤	US ⑥
2703 IN ⑤	US ⑥	2730 IN ③	US ④
2704 IN ③	US ⑤	2731 IN ⑤	US ⑤
2705 IN ①	US ②	2732 IN ③	US ④
2706 IN ③	US ④	2733 IN ④	US ④
2707 IN ③	US ④	2734 IN ④	US ⑥
2708 IN ⑤	US ⑤	2735 IN ⑤	US ⑦
2709 IN ③	US ③	2736 IN ④	US ⑤
2710 IN ③	US ③	2737 IN ⑤	US ⑦
2711 IN ③	US ③	2738 IN ③	US ⑤
2712 IN ⑤	US ⑤	2739 IN ④	US ⑤
2713 IN ⑥ ⁴	US ⑥	2740 IN ②	US ③
2714 IN ③	US ⑤	2741 IN ②	US ②
2715 IN ④ ⁴	US ⑤	2742 IN ⑤	US ⑥
2716 IN ④ ⁵⁺	US ⑥	2743 IN ④	US ⑤
2717 IN ④	US ⑥	2744 IN ②	US ②
2718 IN ③	US ③	2745 IN ③	US ③
2719 IN ③	US ⑤	2746 IN ④	US ⑥
2720 IN ④	US ④	2747 IN ③	US ③
2721 IN ⑤	US ⑥	2748 IN ⑤	US ⑥
2722 IN ③	US ⑦	2749 IN ②	US ② ^{Fdm. Inexp.}
2723 IN ④	US ⑥	2750 IN ①	US ①
2724 IN ④ ²	US ④ ²	2751 IN ①	US -
2725 IN ③	US ④	2752 IN ⑤	US ⑤

2753 IN ①	MS ②	2780 IN ⑤ ^{intake}	MS ⑦⑧
2754 IN ④	MS ⑦	2781 IN ③	MS ③
2755 IN ⑤	MS ⑥	2782 IN ⑤	MS ③
2756 IN ⑤	MS ⑥	2783 IN ⑤	MS ⑦
2757 IN ⑤	MS ⑥	2784 IN ③	MS ⑤
2758 IN ④	MS ⑤	2785 IN ⑤	MS ⑤
2759 IN ③	MS ③	2786 IN ④	MS ⑤
2760 IN ⑤	MS ⑤	2787 IN ⑤	MS ④
2761 IN ④	MS ④	2788 IN ②	MS ③
2762 IN ③	MS ③	2789 IN ⑥	MS ⑧
2763 IN ③	MS ⑤	2790 IN ②	MS ④
2764 IN ③	MS ④	2791 IN ③	MS ⑥
2765 IN ⑤	MS ⑥	2792 IN ④	MS ⑧
2766 IN ③	MS ③	2793 IN ③	MS ④
2767 IN ②	MS ②	2794 IN ③	MS ④
2768 IN ③	MS ④	2795 IN ⑤	MS ⑤
2769 IN ③	MS ④	2796 IN ①	MS ①
2770 IN ③	MS ③	2797 IN ③	MS ④
2771 IN ⑤ ^{intake}	MS ⑦⑧	2798 IN ①	MS -
2772 IN ①	MS -	2799 IN ⑤	MS ⑤
2773 IN ⑦	MS ④	2800 IN ⑧	MS ⑥
2774 IN ①	MS ②	2801 IN ⑤	MS ⑤
2775 IN ④	MS ③	2802 IN ⑤	MS ⑤
2776 IN ①	MS -	2803 IN ④	MS ⑤
2777 IN ②	MS ③	2804 IN ⑤	MS ⑤
2778 IN ⑤	MS ⑤	2805 IN ⑤	MS ①
2779 IN ①	MS ①	2806 IN ⑤	MS ⑤

2507. INPA 1. MS	2537 IN ③	MS ③
2508 - IN ② ^{MS ②}	2538 IN ③	MS ④
2509 INPA 3	2539 IN ^{missing}	MS ?
2510 IN-2, MS 2	2540 IN ②	MS ④
2511 IN 2, MS 3	2541 IN ④	MS ④
2512 IN 3 MS 3	2542 IN ④	MS ④
2513 IN ① MS ①	2543 IN ①	MS ②
2514 IN ③ MS ④	2544 IN ④	MS ④
2515 IN ④ MS ⑤	2545 IN ①	MS ②
2516 IN ① MS ②	2546 IN ③	MS ③
2517. Portion ^{MS ③}	2547 IN ②	MS ③
2518 IN ③ ^{MS ③}	2548 IN ⑤	MS ⑥
2519 IN ⑤ ^{intake} , MS ⑤	2549 IN ①	MS ④
2520 IN ③ ^{MS ③}	2550 IN ④	MS ⑤
2521 IN ① MS ②	2551 IN ④	MS ⑤
2522 IN ④ MS ⑤	2552 IN ④	MS ⑤
2523 IN ③ MS ④	2553 IN ④	MS ⑤
2524 IN ③ MS ③	2554 IN ④	MS ⑤
2525 IN ③ MS ③	2555 IN ④	MS ⑤
2526 IN ④ MS ④	2556 IN ⑤	MS ⑦
2527 IN ④ MS ④	2557 IN ⑤	MS ⑦
2528 IN ④ MS ⑤	2558 IN ⑤	MS ⑥
2529 IN ④ MS ⑥	2559 IN ①	MS ②
2530 IN ④ MS ③	2560 IN ④	MS ⑤
2531 IN ③ MS ④	2561 IN ④	MS ⑤
2532 IN ③ MS ⑤	2562 IN ⑤	MS ⑦
2533 IN ⑤ MS ⑥	2563 IN ⑤	MS ⑥
2534 IN ① MS ①		
2535 IN ③ MS ③		
2536 IN ① MS ①		

3

1

2564 IN (4)	MS (5)	2492 IN (3)	US (2)
2565 IN (4)	MS (5)	2493 IN (2)	US (2)
2566 IN (4)	MS (6)	2494 IN (7)	US (8)
2567 IN (4)	MS (5)	2495 IN (3)	US (3)
2568 IN (4)	MS (5)		
2569 IN (3)	MS (5)	1 st mje Anagallis	
2570 IN (6)	MS (8)	2496 IN (5)	US (7)
2571 IN (3)	MS (4)	2497 IN (2)	US (2)
2572 IN (4)	MS (4)	2498 IN (2)	MS (2)
2573 IN (4)	MS (5)	2499 IN (4)	US (4)
2574 IN (3)	MS (4)	2500 IN (1)	MS —
2575 IN (5)	MS (6)	2501 IN (4)	MS (4)
2576 IN (5)	MS (4)	2502 IN (1)	US (1)
2577 IN (4)	MS (4)	2503 IN (2)	US (2)
2578 IN (4)	MS (5)	2504 IN (1)	US (1)
2579 IN (6)	MS (7)	2505 IN (3)	US (3)
2580 IN (5)	MS (5)	2506 IN (3)	US (4)
2581 IN (4)	MS (5)		
2582 IN (6)	MS (7)		
2583 IN (5)	MS (6)		
2584 IN (4)	MS (5)		
2585 IN	MS (5)		
2586 IN (4)	MS (5)		
2587 IN	MS (5)		
2588 IN	MS (5)		
2589 IN	MS (5)		
2590 IN (5)	MS (6)		

James Zarucchi
Harvard Botanical Museum

Apocynaceae
esp. Couma, Parahancornia,
Hancornia, Lacmellea,
Paccuria, + Ambelania s.l.

(Herb - important)
Neocouma
ternstroemiaceae
(fls)

Sent to Velva Rull a duplicate
J. F. Ramos Lorne Damian
Dionisio
Luis Wello
O. P. Monteiro de Lima
Jose Guedes Sen Raimundo (Lopez)
Aurea
Silene
Lucia de Alencar?
Sebastian "Saba"

(3)

(1)

2564 IN (4)	MS (5)	2492 IN (3)	US (2)
2565 IN (4)	MS (5)	2493 IN (3)	US (2)
2566 IN (4)	MS (6)	2494 IN (7)	US (8)
2567 IN (4)	MS (5)	2495 IN (3)	US (3)
2568 IN (4)	MS (5)		
2569 IN (3)	MS (5)	1 st m. <i>Amorpha</i>	
2570 IN (6)	MS (8)	2496 IN (5)	US (7)
2571 IN (3)	MS (4)	2497 IN (2)	MS (2)
2572 IN (4)	MS (4)	2498 IN (2)	MS (2)
2573 IN (4)	MS (5)	2499 IN (4)	US (4)
2574 IN (5)	MS (4)	2500 IN (1)	MS —
2575 IN (5)	MS (6)	2501 IN (4)	MS (4)
2576 IN (5)	MS (4)	2502 IN (1)	US (1)
2577 IN (4)	MS (4)	2503 IN (2)	US (2)

James Zarucchi
Harvard Botanical Museum

Apocynaceae

esp. *Couma*, *Parahancornia*,
Hancornia, *Laemellea*,
Pacouria, + *Ambelania* s.l.

~~Herb.~~

important

Neocouma
ternstroemiaceae

(fls)

Sent to Velva Pruth a duplicate
or a piece, at least of the 3
specimens she saw or identified
one from R. N. & 2 from M. N.
one in the genus name after M.

R. N. 79-208. *Machaelium* (read a
piece).

BAHIA, B

Mun. de Mucugé, Serra do Sincor
to Andaraí. Elev. 950 m. Growing
in soil near the top of mountain :
orchids and Bromeliaceae. Small
sticky leaves, few plants flower
in color.

9 May 1976

Cleofé E. Calderón, Talmón S. Santos, and

*Collected under the auspices of the Smith
Society, and Centro de Pesq.*

Flora del Arica -

$$\begin{array}{r} 2986 \\ - 2492 \\ \hline \end{array}$$

$$\begin{array}{r} 494 \\ 189 \\ \hline \end{array}$$

Angonilla

R. Negro

$$\begin{array}{r} 683 \\ 15 \\ \hline \end{array}$$

Bahia

$$\begin{array}{r} 698 \end{array}$$

2496, 1st no of Amazonian collection
(not Manaus)



2519^v 1I, 5G, -V 2I, 4G, -

"2706"

2733^v 1I, 3G, -V 1I, 3G, -

2754^v 2I, 4G, 1R^v 2I, 3G, ~~4R~~ -

2755^v 2I, 6G, 1R^v 2I, 5G, 1R

2756^v 1I, 3G, 1R^v 1I, 2G, 1R

2771^v 1I, 2G, -V 1I, 2G, -

2780^v , 3G, V 1I, 3G,

2782^v 1I, 3G, -V 1I, 3G, -

2783^v 3I, 4G, 1R^v 3I, 5G, 1R

2784 no bulky?

2813^v 1I, 3G, -V 2I, 3G, -

2833^v 2I, 3G, 4S, 1R^v 3I, 3G, 1R, 2S

2846^v 1I, 4G, 1R^v 1I, 3G, 2R

2867^v 2I, -, 1R^v 2I, -, 1R

2870^v 1I, 4G, 1R^v 2I, 4G, 1R

2873^v 2I, 2G, 1R^v 2I, 2G, 1R

2829^v 1I, 4G, 1R^v 1I, 3G, 1R

2818^v 2I, 4G, -V 2I, 4G, -

2874^v 2I, 3G, 1R^v 2I, 2G, 1R

2894^v 2I, 4G, 1R^v 2I, 4G, 1R

2910^v 2I, 5G, 1R^v 2I, 5G, 2R, 4S

2911^v 2I, 5G, 2R^v 2I, 4G, 1R

2926^v -, 3G, -V -, 4G, -

2966 & 2970

G - IDENTIFICAÇÃO DOS RESPONSÁVEIS PELA I

RESPONSÁVEL DIRETO: MA. SÍLVIA de MENDONÇA
Nome

LOCAL: INPA

COORDENADOR SUB-REGIONAL: _____
Nome

LOCAL: _____

COORDENADOR REGIONAL: _____
Nome

LOCAL: _____

H - OBSERVAÇÕES

2496, 1st no of Amazonian collection
(not Manaus)



